

and domestic cattle. One of these went across the migration track. Though the animals could get round the obstacle, each leg of their journey would now be 200 km longer – an impossible distance given the lack of permanent water on the extended route. Even today, with the fence gone (it was taken down in 2004), there is dangerously little drinking water to support the zebras on the return journey to the Okavango.

E

As a zebra can live up to 20 years, the migration must have skipped at least one generation during the 40 or so years that the fences were up. This prompts another question: it has always been assumed that the young of social herbivores like zebras learn migratory behaviour from their parents, so how did the latest generation learn when and where to go? Not from their parents, who were prevented from migrating. Did they follow another species, such as elephants? We may never know.

F

Hattie's data points to the conclusion that there are several zebra populations adopting different behaviour. The first, like the vast majority of the Okavango zebras, take it easy, spending the entire year by the river. The second group, 15,000–20,000 strong, work a bit harder. They divide their time between the Makgadikgadi salt pans and the Boteti River, which is reasonably near by. They sometimes struggle to find water in the Boteti area during the dry season, often moving 30 km in search of fresh grazing. Their reward: the juicy grass around the Makgadikgadi after the rains. The final group of zebras, whose numbers are more modest (though as yet unknown), must surely be considered as among the animal kingdom's most remarkable athletes. By moving between the Okavango and the salt pans, they enjoy the best of both worlds. But the price they pay is an extraordinary journey across Botswana.

G

Endangered species naturally tend to grab the headlines, so it's refreshing for a relatively abundant animal like the zebra to be the centre of attention for once. Zebras are a vital part of the food chain: understanding their migration in turn helps us to interpret the movements of their predators, and Hattie's research has shed light on the impact of fences on migratory animals. So what triggered her interest in zebras? She explains that it is easier to get funding to study exciting animals like lions. Crucial as that undoubtedly is, she believes that herbivores like zebras are key to understanding any ecosystem. The scientific community is fortunate that people like Hattie are willing to take the hard option.